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# NEWS

## The Advantages of Ducks and Their Eggs

By John Metzger

Many people are unaware of the amazing potential of using ducks for egg production. Some breeds of ducks can lay more eggs than chickens, and ducks are generally hardier than chickens. There are also more nutrients in duck eggs, and many people consider ducks more entertaining.

Worldwide, not only are people eating more duck eggs, ducks are taking a larger share of total egg production. In 1991, 6.57% of eggs consumed were duck eggs, in 2009 it increased slightly to 7.63%. This is not a huge jump, but it still shows a gradual trend away from chicken eggs toward duck and other eggs worldwide.

### Egg Production

The most common heritage breed of duck used for egg production is the Khaki Campbell duck. A well-managed Khaki Campbell duck will lay 210-220 eggs in ten months. The eggs are about 34-35 ounces per dozen (80 grams/egg) and about 15% have a greenish tint to their shell color.

Runner ducks also have a reputation for good egg production. In Asia, their continent of origin, they are still known for egg production, but since they came to North America about 80 years ago, they have been more often bred for shape and a variety of colors. There has been very little selection for egg production. Therefore, annual egg production has dropped and they are now an average egg layer.

Welsh Harlequins are another good egg-laying breed. They are the calmest duck breed we have on our farm and are rated Critical by ALBC.

How do you get excellent egg production from ducks?

- Feed them, starting at 4.5-5.5 months of age, with a well-balanced, breeder/layer feed. You cannot feed them only whole grains and expect good egg laying.
- Supplement them with light, especially when the days start to get shorter in the summer, so they get 17 hours of light a day (natural plus artificial). They should never experience shorter and shorter days, as this is nature's way of telling them to stop laying.
- Do not stress them. They like a routine and do not like changes. We try to have the same person pick up eggs in the same flocks each day so the ducks are used to that particular person. I was told once that a flock will get used to a train going by 50 yards away if it happens every day. But if something unusual happens, such as a dog barking a half

mile away, they will be stressed. They especially do not like lights moving in their building at night (such as headlights of passing cars).

### Duck Egg Shells

Duck egg shells and their shell membranes are very strong. Whereas a chicken egg may leak if it has a crack, a duck egg rarely leaks. The membrane keeps the contents intact. In fact, if you are careful, you can probably break the shell of a duck egg into 1/4" size pieces and the membrane will keep it all together and it will not leak. This extra protection has evolved due to ducks laying their eggs in swampy and wet places.

The shell of a duck egg is much smoother than a chicken egg – some people describe it as waxy. Duck eggs come *continued on page 6*



Magpie, Welsh Harlequin, and Cayuga ducks enjoy playing in the sprinkler. Photo submitted for 2011 ALBC photo contest.



# The Advantages of Ducks and Their Eggs

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in three colors: white, blue/green, and gray/black. Most eggs are white but many breeds lay 5 to 25 percent blue/green eggs. The Cayuga, an all-black duck, oftentimes lays a black egg early in the season, but as time progresses, the shell becomes lighter and lighter until many are white.

## Qualities of Duck Eggs

Duck eggs have higher nutrient levels than chicken eggs. The USDA has a complete breakdown of duck egg qualities. Duck eggs have higher levels in seven of eight minerals, seven of nine vitamins and eleven of eighteen amino acids analyzed. Duck eggs have higher levels of protein, energy, lipids, carbohydrates and ash. The only thing that chicken eggs have more of is....water.

It is also interesting that many people who are allergic to chicken eggs can eat duck eggs. We ship duck eggs throughout the United States on a regular basis to people that use duck eggs exclusively in their cooking because they are allergic to chicken eggs. They freeze the eggs and then thaw them as needed.

Whenever anyone wants to study duck egg qualities, they invariably come upon research done by the University of Nebraska in the early 1950s with Khaki Campbell ducks. The bottom line was that duck eggs stored better for longer periods

of time and there was very little taste difference between the two eggs. This may be associated with the thicker shells and egg membranes.

## How to Use Duck Eggs

Duck eggs have a reputation of being excellent for baking. One of the quotes taken from the Nebraska research paper was particularly interesting. "The cakes made with duck egg whites were noticeably whiter than those made with chicken egg whites because of the almost complete absence of riboflavin in the [chicken egg] whites."

Duck eggs can be used wherever chicken eggs are used in cooking. Keep in mind, however, that duck eggs are larger than chicken eggs. An average duck egg is 25 to 30 percent bigger than an Extra-Large chicken egg.

Duck egg whites do not fluff very well on their own, but if you add a tablespoon of lemon juice for every 3/4 cup of egg whites, the whites fluff very well. An alternative is to add cream of tartar to reduce the pH. It also helps to have the eggs at room temperature when you whip them.



**A flock of Runner ducks at Metzger Farm.**

**Eggs pictured from left to right: Cayuga, Khaki Campbell, Large Chicken, Runner, Pekin. Photo by John Metzger.**

Duck eggs are very popular in England and there are several large producers there that sell duck eggs exclusively. I have traveled in England and duck eggs are sold alongside chicken eggs in some large grocery stores such as Safeway. For some English recipes for duck eggs, visit [www.duckeggs.co.uk/eggs.htm](http://www.duckeggs.co.uk/eggs.htm) or [www.watercresslane.co.uk/recipes/](http://www.watercresslane.co.uk/recipes/).

The country with the highest per capita use of duck eggs is Thailand where each person uses an average of 67 duck eggs per year! China is next at 41 duck eggs. Besides using them fresh, the Chinese have three special preparations of duck eggs:

- **Salted:** Fresh duck eggs are put in a salt brine or in a salt/clay mud mix. Within several weeks, the salt has permeated the eggs through the shell, white, and into the center of the yolk. The yolk turns hard and you can squeeze oil out of the yolk prior to boiling. Salted eggs are used as condiments on vegetables and other dishes. The salted duck egg

yolk is also used in the Chinese Moon Cake pastries.

- **Century or Thousand Year:** These eggs are preserved by using a strong alkaline solution to increase their pH. Both the white and yolk turn a deep emerald color.

- **Balut:** These are fertile eggs that have been incubated for 17-19 days and are boiled. They are considered highly nutritious and an aphrodisiac by some.

## How to Manage Ducks

The biggest difference between ducks and chickens is their use of water. For chickens,

water is only a nutrient. For ducks it is also a place to play, to clean, to look for food, and to keep cool. Unless you take extra precautions, ducks will quickly turn a dry pen into a wet pen.

It is a common misconception that ducks need swimming water. They enjoy it but it is not a requirement for their health. Some also believe that ducks have to have water in which to wash their head and bill. We have found this is also not necessary. However, ducks do enjoy water and will stay much prettier with bathing water. Give them a bucket of water twice a week or a kiddie pool once a week. With this they can clean up and it is less of a mess for you.

The easiest way to keep a duck pen dry is to put some type of wire or plastic flooring around their waterers. Under this floor you can dig a pit or have a cement lined container that can be periodically cleaned. When water is spilled, it will go through the floor and out of reach of their mud-making bills. This nutrient-rich water can be used to keep your compost moist.

In a blog post I listed a variety of manufacturers of wire and plastic flooring. Try any of these products and your pen will remain much drier. (<http://metzerfarms.blogspot.com/2011/09/sources-of-poultry-flooring.html>)

Ducks don't scratch. This may be easier on your garden, but scratching chickens do an excellent job of fluffing and turning their bedding. Ducks just walk on it and occasionally poke a bill in their bedding to look for a snack. Because of this you may need to turn and mix your ducks' bedding or add bedding on a more regular basis than for chickens.

If your feed store offers a waterfowl feed, you are lucky. If they don't, the use of chicken or game bird feed is fine. It is important that the feed be in the form of a pellet or crumble. These are much easier for a duck to eat than a mash. If ducks are fed mash, they will usually take a mouthful to their water and swish it around to make it easier swallowing. The problem is that much of the mash is wasted as it ends up in the bottom of their waterer.

Most ducks lay their eggs in the early morning. They start about two hours before sunrise and normally finish an hour after sunrise. The advantage of this is that they will lay

most of their eggs before you let them out in the morning, making collection easier. Some people feel it is a disadvantage if you have a very cold climate as the eggs have a greater chance of freezing if laid in the early morning hours. In cold climates, factor this into planning the location of nest boxes.

Ducks have a strong flocking instinct which makes it easier to herd them to a new pen or train them to come in at night. In fact, trainers of competitive sheep dogs often train their pups on a small flock of ducks as the ducks flock much like sheep.

Housing is very simple for ducks. All you need is protection from severe weather. Most of the time they will be out in the rain and snow and sleet instead of inside. They like to explore in any weather as they never know when they might find something good to eat!

The last thing to remember is that unless you have Muscovy or Mallards, your ducks will not fly. All activity will be at ground level. You don't need elevated nests or perches. For nests, they just want something that is private and safe. A nest about 14"x14" with three walls about 16" high and a 1"x4" in front to keep in the bedding and you will have a perfect nest. Or use some tires or boxes. Fill them with straw, wood shavings or other bedding and they will be very happy.



**Pekin ducks (not a rare breed) on pasture at Metzer Farms. Photo by Jeannette Beranger.**

### Where Can I Get Duck Eggs To Try?

- Check the ALBC Breeders and Products Directory at [www.albc-usa.org](http://www.albc-usa.org).
- Phone the person in charge of the poultry show at your local fair and ask who has ducks.
- Stop at your nearest Asian food market and see if there are any local farms that sell them duck eggs.
- Inquire at your local farmers' market.
- Visit our website ([www.metzerfarms.com/EggSales.cfm](http://www.metzerfarms.com/EggSales.cfm)) where we list our customers that sell fresh duck eggs. Maybe one is near you!

### Where Can I Get Some Ducks?

Don't take the first cute duckling that comes along. Determine the breeds and sexes you want and then find someone that can provide these. As with all heritage breeds, if you are purchasing breeding stock, first educate yourself about the breed and then ask lots of questions of the sellers to make sure you obtain quality stock.

- Use your ALBC Breeders Directory or the online directory at [www.albc-usa.org/breaddir/](http://www.albc-usa.org/breaddir/).
- Check out mail order hatcheries that sell ducklings. You can find them online or in the classifieds of many agriculture/small farm/poultry hobby magazines. Most hatcheries have very small minimums so you don't have to get more than you want.
- Visit your local feed store. Many either stock ducklings in the spring or can order them for you.

You won't be disappointed in your ducks. They are very hardy and should live for many years supplying you with delicious eggs. There are a wide variety of duck breeds with many different sizes, colors, and characteristics, but what we hear about the most from our customers is their ducks' entertaining personalities and backyard activities.❖

*John Metzer is the owner of Metzer Farms, a family owned and operated farm in Gonzales, California, specializing in ducks, geese, and game birds. John has a degree in animal science from the University of California at Davis and currently serves on the ALBC Board of Directors. He can be reached at [metzer@metzerfarms.com](mailto:metzer@metzerfarms.com).*